

# Atlantic Richfield Company

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July 7, 2014

Mr. Steven Way  
On-Scene Coordinator  
Emergency Response Program (8EPR-SA)  
US EPA Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

**Delivered via e-mail**

**Subject: June 2014 Monthly Progress Report  
Rico-Argentine Mine Site – Rico Tunnels  
Operable Unit OU01, Rico, Colorado**

Dear Mr. Way,

This progress report describes activities conducted during the month of June 2014 at the Rico-Argentine Mine Site (site) and activities anticipated to occur during the upcoming month. These activities are organized by task as identified in the Removal Action Work Plan. This progress report is being submitted in accordance with Paragraph 35.a of the Unilateral Administrative Order for Removal Action (the "UAO"), dated March 17, 2011.

## **ACTIVITIES FOR JUNE**

This section describes significant developments during the preceding period including actions performed and any problems encountered during this reporting period.

### **Site-Wide Activities**

- Meeting with U.S. Environmental Protection Agency (EPA) on June 25, 2014, in the Town of Rico to present the results from site investigation activities and provide project updates for the Wetland Demonstration project, Solids Repository, St. Louis Tunnel Hydraulic Controls, Pond 14 Solids Removal, and source control response to comments.
- Meeting on June 25, 2014 with the Town of Rico, Colorado Department of Public Health and Environment (CDPHE) Voluntary Cleanup Program (VCUP) representative Mark Rudolph and EPA representative Steve Way to discuss the placement of excavated soil from the Town's waterline replacement project into the Soil Lead Repository north of the St. Louis Ponds area. Discussions continue with the Town to characterize soils and coordinate transport to the Repository with current site activities. Also discussed maintenance plan for Argentine tailings VCUP with EPA, CDPHE, and Outlook Resources.

### **Task A – Pre-Design and Ongoing Site Monitoring**

- Completed the 2014 Peak Flow Sampling event on June 5, 2014.
- An inspection of the ponds was performed on June 4, 2014. The inspection revealed no blockages or new concerns.
- Downloaded flow measurement data from the two parshall flumes associated with the ponds inlet and outlet at DR-3 and DR-6.
- Performed additional evaluation of potential improvements on surface water flow data gathering and telemetry. Continued work on the application for an antenna permit with the Town of Rico.

- Maintenance and diagnostic tests of ultrasonic meter at DR-3 being performed.

#### **Task B – Management of Precipitation Solids in the Upper Settling Ponds**

- The St. Louis Tunnel discharge was routed to Pond 15 during the Month of June 2014.
- On June 4, 2014, the site was accessed to observe the condition of the Pond 15 outlet and to perform a pond inspection. The pipe condition is currently stable and no additional erosion was observed at the separation of the bypass pipeline and the Pond 15 outlet.
- Geotechnical analysis of the Pond 14 solids and calcines completed to evaluate removal of solids.
- Continued drafting the 2014 Pond 14 Solids Removal Work Plan and Marine Assurance Plan.
- Identified qualified contractor for the Pond 14 solids removal.

#### **Task C – Design and Construction of a Solids Repository**

- Participated in a Dolores County Planning Commission meeting including EPA, CDPHE, and Atlantic Richfield Company representatives to discuss the intent to initiate construction of the Solids Repository and how that could affect the Land Use Development process. The Planning Commission voted that the County certificate of designation process could continue after construction was initiated.
- CDPHE initiated the public comment period on the Solids Repository Engineering Design and Operations Plan on June 26, 2014.
- Construction of the Solids Repository was initiated on June 16, 2014, including mobilization, demolition of foundations, and limited clearing.
- Continued work to acquire property interests at the Solids Repository location.

#### **Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit**

- Developed conceptual plans for the inclusion of a permanent collection system and pipeline to collect and convey water discharging from the St. Louis Tunnel debris plug to a point near a future water treatment system.
- During the meeting with EPA on June 25, 2014, presented the conceptual plans for the revised hydraulic control measures requested by EPA and discussed the implementation of the permanent collection system and pipeline from the St. Louis Tunnel. Concerns were raised about the potential to interfere with startup and testing of the influent flows to the wetland demonstration system and delaying the installation of the proposed system until after the startup and operation of the wetland demonstration system, later this fall or next year. Work will proceed on installation of the pumping system and smaller discharge pipe this year.
- Continued detailed design of the proposed St. Louis Tunnel pumping system for the hydraulic control remedy.

#### **Task E – Source Water Investigations and Controls**

- Continued Blaine Tunnel water depth and flow monitoring behind the Blaine Coffey Dam and Blaine Tunnel Flume.
- Received comments from the EPA on June 12, 2014, regarding the *Evaluation of Source Water Controls Report*, which was submitted to EPA on December 31, 2013, in accordance with Subtask E3 of the Removal Action Work Plan, and began developing responses to comments.

#### **Task F – Water Treatment System Analysis and Design**

- Continued pilot-scale wetland treatability study activities.
  - Flow through the pilot-scale wetland will be maintained until the matrix materials from the rock drain and wetland cell are re-used as inoculum for the wetland demonstration.
  - Performed sampling and monitoring on June 4, 2014, in general accordance with the task-specific *Sampling and Analysis Plan*.



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- Continued wetland demonstration treatability study activities.
  - Surveyed and staked-out the wetland demonstration unit processes.
  - Completed equipment mobilization, clearing, and grubbing.
  - Completed shaping and grading Settling Basin Number 1 and the Surface Flow Wetland.
  - Shaping and grading Settling Basin Number 2, the Biotreatment Cell, and the Aeration Channel are underway.
  - The 18-inch bypass pipe connecting the Flow Diversion Box to Pond 18 was installed and backfilled under the site access road.
  - Plumbing between the St. Louis Tunnel discharge channel headgate and the Flow Diversion Box are underway.
  - Piping between the Surface Flow Wetland and the Horizontal Subsurface Flow Wetland was installed.
  - Pipe stubs into and out of Settling Basin 1 were installed in preparation for liner installation.
  - Startup of wetland demonstration system scheduled for August 15, 2014 per discussions with EPA during site meetings in May and June 2014. EPA to provide letter to Atlantic Richfield acknowledging modified schedule.

### **ACTIVITIES FOR UPCOMING MONTH**

This section describes developments expected to occur during the upcoming reporting period, including a schedule of work to be performed, anticipated problems, and planned resolution of past or anticipated problems.

#### **Site-Wide Activities**

- Improve vehicle access to the Soil Lead Repository to facilitate delivery of excavated soils accepted for disposal at the Repository from the Town's planned water pipeline installation project.

#### **Task A – Pre-Design and Ongoing Site Monitoring**

- Inspect the St. Louis Ponds System, water levels, and free-board.
- Continue work on submittal and processing of the application for a telemetry antenna permit for the Rico office building.

#### **Task B – Management of Precipitation Solids in the Upper Settling Ponds**

- Inspect the Pond 15 outlet: observe any changes in erosion.
- Continue routing St. Louis Tunnel discharge to Pond 15 until Wetland Demonstration Construction facilitates discharge to Pond 18, then begin filling Pond 18.
- Complete the 2014 Pond 14 Solids Removal Work Plan and submit to EPA.
- Complete the 2014 Marine Assurance Plan and Marine Emergency Response Plan.
- Prepare scope of work package for Pond 14 solids removal work.

#### **Task C – Design and Construction of a Solids Repository**

- Continue work to secure the Dolores County Land Development Agreement and accompanying certificate of designation for the solids repository.
- Continue efforts to acquire property interests at the solids repository location.
- Continue construction of the Solids Repository including demolition of foundations, relocation of solids in the Interim Drying Facility to facilitate relocation of a portion of the existing access road, and construction of access road realignment and relocated underground utility corridor.



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#### **Task D – Hydraulic Control Measures for the Collapsed Area of St. Louis Tunnel Adit**

- Continue detailed design for the SLT hydraulic control system.

#### **Task E – Source Water Investigations and Controls**

- Continue Blaine Tunnel water depth and flow monitoring behind the Blaine Coffey Dam and Blaine Tunnel Flume.
- Continue developing responses to EPA's comments on the *Evaluation of Source Water Controls Report*.

#### **Task F – Water Treatment System Analysis and Design**

- Continue pilot-scale wetland treatability study activities.
  - Maintain flow through the pilot-scale wetland until the matrix materials from the rock drain and wetland cell are needed for use as inoculum in the wetland demonstration.
- Continue wetland demonstration treatability study construction activities, including basin grading and compaction, flow control piping installation, liner installation, and matrix material mixing and placement.
- Continue scoping additional data needs as necessary related to treatment system alternatives.

If you have any questions, please feel free to contact me at (951) 265-4277.

Sincerely,



Anthony R. Brown  
Project Manager  
Atlantic Richfield Company

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